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Pleurotheciopsis triseptata sp. nov. from China

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Abstract—A new anamorphic species, *Pleurotheciopsis triseptata*, is described and illustrated from specimens collected on dead stems in China. This fungus is characterized by polyblastic and sympodial conidiogenous cells producing catenate, fusiform, 3-euseptate, versicolored conidia.

Key words—microfungi, hyphomycete, taxonomy

Introduction

Pleurotheciopsis B. Sutton was erected by Sutton (1973) for *P. pusilla* (the type species) and *P. bramleyi*. The genus is characterized by distinct and brown conidiophores with polyblastic, integrated, sympodial, and denticulate conidiogenous cells that produce euseptate and hyaline to brown conidia that form acropetal unbranched chains (Sutton 1973, Ellis 1976, Castañeda & al. 2001). Assigning species in *Pleurotheciopsis* is primarily based on conidial morphological characters, including shape, septation, size, and pigmentation. Five additional species have been described (Castañeda 1985, Cazau & al. 1993, Castañeda & Iturriaga 1999, Castañeda & al. 2001, Rambelli & al. 2008), but *P. setiformis* (with synchronous and ampulliform conidiogenous cells and setae around the conidiophores) was subsequently transferred to *Ampullicephala* by R.F. Castañeda & al. (2009). Castañeda & al. (2001) provided a key to five of the accepted *Pleurotheciopsis* species.

During a survey on wood-inhabiting microfungi in China, a new species that belongs to the genus *Pleurotheciopsis* was found. Specimens are deposited in the Herbarium of Department of Plant Pathology, Shandong Agricultural University, Taian, Shandong, China (HSAUP) and the Mycological Herbarium, Institute of Microbiology, Chinese Academy of Sciences, Beijing, China (HMAS).

Taxonomy

Pleurotheciopsis triseptata L.G. Ma & X.G. Zhang, **sp. nov.** FIG. 1

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Differs from *Pleurotheciopsis sylvestris* by its 3-euseptate and smaller conidia, and from *P. bramleyi* and *P. websteri* by its 3-euseptate and versicolored conidia that are bigger than *P. bramleyi* and shorter than *P. websteri.*

TYPE: China, Sichuan Province, Longchi National Forest Park, on dead stems of an unidentified broadleaf tree, 22 Apr. 2012, L.G. Ma (**Holotype**, HSAUP H2239; **isotype**, HMAS 146166).

ETYMOLOGY: *triseptata*, referring to the number of conidial septa.

COLONIES on the natural substratum effuse, brown to dark brown, hairy. Mycelium partly superficial, partly immersed, composed of branched, septate, pale brown, smooth hyphae, 2.0–3.5 μm diam. CONIDIOPHORES macronematous, mononematous, single, unbranched, erect, straight to flexuous, cylindrical, smooth, thick-walled, brown to dark brown, pale brown towards the apex, 4–9-septate, 105–240 μm long, 6.5–13.5 μm diam at the base, 4–6.5 μm wide at the tapered apex. CONIDIOGENOUS CELLS integrated, terminal, polyblastic, sympodial, brown, cylindrical, smooth, thick-walled, with 1–4 short, unthickened denticles, 29.5–60 × 4.5–6.5 μm. Conidial secession schizolytic. CONIDIA in distinct, unbranched, acropetal chains, fusiform, sometimes curved, thick-walled, middle cells brown and end cells pale brown to subhyaline, tapered towards the ends, 3-euseptate, intercalary conidia 24–33.5 × 5.5–7.5 μm, truncate at the ends, apical conidia 22.5–33 × 6–7.5 μm, obtuse at the apex and truncate at the base.

COMMENTS—*Pleurotheciopsis triseptata* is most similar to *P. sylvestris* R.F. Castañeda & Iturr. in conidial shape and pigmentation, but *P. sylvestris* has conidia that are 4–7-septate and larger (29–49 × 7–8.5 μm; Castañeda & Iturriaga 1999). *Pleurotheciopsis bramleyi* B. Sutton and *P. websteri* Cazau & al. also resemble our new species, but *P. bramleyi* has conidia that are hyaline, 2–3-septate, and smaller (16.5–25 × 4.5–6.5 μm; Sutton 1973),

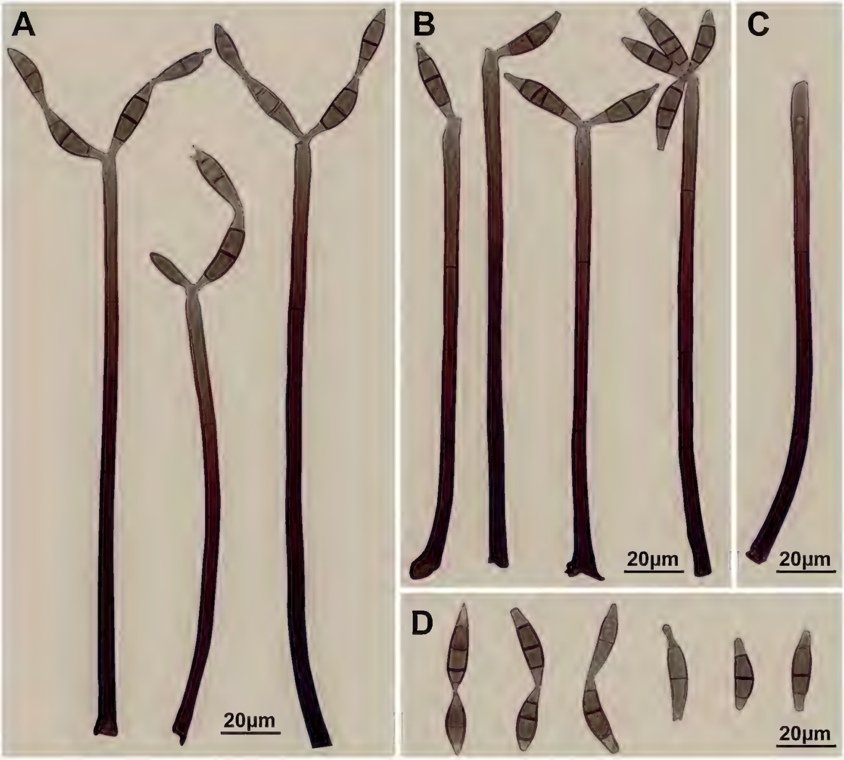

Fig. 1. *Pleurotheciopsis triseptata* (holotype, HSAUP H2239).
A, B. Conidiophores, conidiogenous cells, and conidia;
C. Conidiophore with conidiogenous cell; D. Conidia.

while conidia in *P. websteri* are 5-septate, hyaline, longer, and narrower (32–38 × 5–6 μm; Cazau & al. 1993).

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